City of San Antonio

Fire Master Plan

FY 2002 - 2006

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Master Planning History

Background

The Fire Department has always focused on long-range planning to ensure that the highest possible level of fire and EMS services are provided to the citizens of our community. This has been accomplished through the Fire Department's Master Planning efforts, which were initiated in 1994 and continue today.

Initially, a Fire Department Blue Ribbon Committee was established in December, 1990 by City Council to review the Divisions within the Department and make recommendations on issues deemed vital to providing adequate and equitable emergency services. The committee consisted of eight citizens who spent over a year developing their recommendations. These recommendations were then presented to City Council in March 1992. At that time, City Council directed Fire Department staff to develop a Five-Year Master Plan.

In September 1994, the San Antonio Fire Department completed the Fire Department Five-Year Master Plan. The plan was developed through the assistance of firefighters and key departmental personnel. In the development of the Five-Year Master Plan, Departmental personnel reviewed and considered various studies and reports including the PTI Fire Station Location Study, the Blue Ribbon Committee Report, and the Johnson-Dempsey study that evaluates 14 existing fire stations.

The plan was presented to City Council in December of 1994. In addition to recommending the construction and renovations of numerous stations throughout the City, the plan recommended several improvements in areas such as fire suppression, fire prevention and EMS. The improvements included the addition of uniform personnel, civilian personnel, additional fully staffed EMS units, a Firefighting/EMS Vehicle Replacement program and funding for Peak Period EMS units.

In May of 1997, following six months of review by both citizens and Fire Department personnel, Council approved an amendment to the Five-Year Plan. This amendment addressed three key issues of the original master plan. These issues included the renovation of fire stations, new fire station construction and four-person pumper manning. In addition to the three issues, the construction of two new fire stations to address Fire Department travel times in certain areas of the community were added. At this time Council also directed staff to implement a five-year plan which would address Fire Department issues on an annual basis.

Accomplishments

In recent years, the Master Plan can be credited with numerous accomplishments. In the EMS Division, two full-time EMS units were added to bring the total number to 25 units. This was accomplished while maintaining the Peak Program, which provides as many as ten additional EMS units during periods of peak workload. This change was implemented to maintain the Department's travel time goal of averaging six minutes within the city and seven minutes within the suburban incorporated cities.

In order to maintain a minimum level of four person manned pumpers, the following levels were established through the Master Plan process. Beginning in FY 1998, 33 pumpers were manned with a minimum of four

Master Planning History

personnel on a daily basis. This was increased to 36 in FY 1999, 39 in FY 2000, 40 in FY 2001, 40 in FY 2002, 41 in FY 2003 and 42 in FY 2004, 43 in FY 2005 and FY 2006.

Recent Fire Prevention Division enhancements consist of decentralization through the provision of technological enhancements. This enhancement allows for a more efficient delivery of services to the community.

To further support Emergency Operations, a District Chief was added to enhance the management of the Training and Services/Maintenance Divisions. Other improvements included additional mechanics for the Services and Maintenance Division, expansion of the Department's minority recruitment effort, the creation and staffing of a Management Information Services Division, and the creation of a Fire Department Safety Officer position to oversee personnel who are exposed to workplace dangers.

The Master Plan also addressed the Fire Department facility needs by establishing a facilities maintenance program under the supervision of a Facilities Coordinator.

Regarding infrastructure improvements, the plan provided for the renovation of six aging fire stations, the replacement of six outdated fire stations within their response area, the addition of two new stations to address extended response times in the city, and the construction of a new Fire Training Academy. With respect to fire station renovations, the Department has and will continue to make every effort to retain the affected fire companies on site, temporarily relocate them to the nearest available fire station or implement a combination of both options. These steps allow the Department to continue to provide prompt fire suppression and EMS services to the community while these much needed renovations take place.

In reference to the construction of new fire stations, the Master Plan provided for the replacement of older fire stations which could no longer support modern fire companies, their required number of personnel and associated equipment.

Improve Public Protection Classification

Background

A goal of the Fire Department is to utilize the Master Plan to improve the Public Protection Classification of the City of San Antonio. The Public Protection Classification is a measure that the insurance industry uses to quantify the major elements of a city's fire suppression system. Generally, citizens can expect to pay lower property insurance premiums when their city achieves an improved Public Protection Classification.

The Public Protection Classification is determined by the Insurance Services Office (ISO) using the Fire Suppression Rating Schedule. The Fire Suppression Rating Schedule is based on 10% for Receiving and Handling Fire Alarms, 50% for the Fire Department, and 40% for the Water Supply. In Texas, the Texas Addendum is also used to supplement the Fire Suppression Rating Schedule. The Texas Addendum recognizes and credits a municipality's fire prevention activities.

The Public Protection Classification is based on a relative scale from one to ten with one being the best possible rating. Currently, the Public Protection Classification rating for the City of San Antonio is a three.

According to the Texas Department of Insurance, a reduction from a three rating to a two rating could reduce the benchmark for Homeowners insurance rates by 8.2% for brick and brick veneer construction, by 8.1% for asbestos clad and stucco construction, and by 8.5% for frame construction.

Even though a decrease in the City's PPC rating may result in a reduction in the established benchmark, this may not have a direct impact on individual homeowner insurance rates. Therefore, homeowners are encouraged to compare policies in order to obtain the best possible rates.

The Public Protection Classification also has an effect on economic development for the City. Companies interested in expansion or relocation understand that a lower rating not only leads to lower insurance premiums, but is also an indicator of a City's commitment to public services.

Program Description

The Department will conduct a pre-rating, self-analysis in conjunction with an ISO representative. This analysis will focus on areas having the greatest impact on the City's ISO rating.

Implementation

Members of the Department have attended ISO work sessions to become trained, and to develop a working relationship with ISO members. Currently the department is in the process of initiating a pre-rating self-analysis.

Additional Technical Rescue Capabilities

Background

In FY 2000, the Master Plan expanded the Department's capability to respond to major incident extrication by equipping four strategically located enhanced ladder truck companies with special rescue equipment. The Technical Rescue Team (TRT) is a special unit that performs unique, high level rescues involving swift water, high angles, trench cave-ins, water dives, cave rescues, and vehicle rollovers with trapped victims. Currently, the TRT, which is located downtown, is the only unit in the City that has the advanced equipment and trained personnel to effectively rescue victims from swift water incidents. In FY 2000, the TRT responded to 47 swift water incidents citywide. Based on historical data, approximately 15% of the incidents require special equipment to rescue victims. The TRT's average response time to these types of incidents is approximately 20-25 minutes, which delays the rescues and commencement of medical treatment.

Program Description.

This program increases the scope of the enhanced rescue truck to include swift water rescue. This program should result in saved lives and less serious injuries, which may arise from, delayed rescues. This improvement would also result in increased hour availability of the TRT to handle the other major types of special rescues. The TRT personnel would train the enhanced ladder truck company personnel while on duty (in service, with no overtime) as well as continue to respond to incidents throughout the entire City while the new equipment and training for the four enhanced ladder truck companies is phased in.

Implementation.

The Department proposes to equip two enhanced ladder truck companies with the special equipment in FY 2003 and FY 2004. The cost of the equipment and training for each enhanced ladder truck company is $60,000.

SWIFT WATER RESCUE CAPABILITIES
FIRE SUPPRESSION

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs		55,000	55,000	-		110,000
Recurring Costs		5,000	10,000	10,000	10,000	35,000
TOTAL	**$ -**	**$ 60,000**	**$ 65,000**	**$ 10,000**	**$ 10,000**	**$ 145,000**

Additional EMS Unit/Redeployment of Peak Period Unit

Background

The Emergency Medical Services (EMS) Division of the San Antonio Fire Department serves a population of approximately 1.2 million within an area of 417 square miles. The number of EMS units dispatched in FY 2000 was 103,255. In order to augment the service provided by full-time units, the Fire Department established a Peak Period Staffing Program, which activates additional EMS units to address areas within the City that exhibit an elevated number of requests for emergency services during specific periods of a day or week. Activation of units via the current Peak Period Program is based on statistical information relative to high response times and a higher than average number of requests for emergency services by census tract.

At this time, the EMS Division utilizes 25 full-time units and as many as ten Peak Period units on a daily basis. Based on projections, EMS units are expected to achieve an 8.49 minute response time within the city and 9.83 minutes for suburban cities in FY 2001. In FY 2002, EMS projects to have an average response time of 8.76 minutes within the city limits and 11.40 minutes within the suburban cities. Although the Department has been able to achieve desired response times for a large portion of the City, there are high growth areas in the periphery that are receiving service with extended response times.

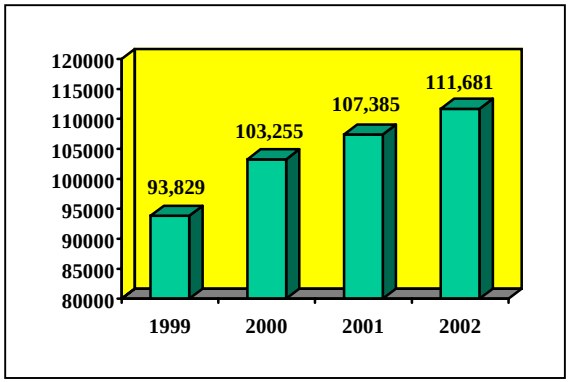
Description

In order to specifically address areas experiencing extended EMS response times, the Fire Department added one full-time unit in FY 2000 and one full-time unit in FY 2001 and proposes one full-time unit in FY 2002 in areas currently serviced by Peak Period units. The activation of full-time units into these high-activity areas would allow the redeployment of the Peak Period units into targeted peripheral locations of lesser call volume that are experiencing extended response times.

Implementation

The model currently used to designate placement of Peak Period units targets and addresses concerns in census tracts that have demonstrated higher than average requests for service and extended response times. Demands within targeted census tracts are also reviewed for concentrated increases specific to the hour of the day and the day of the week, which are addressed with the activation of Peak Period units. As concentrated daily demand periods within a given census tract increase within the 24 hour cycle, the increase may be addressed with a full-time EMS unit. Based on this approach, the Department recommends locating a full-time unit at one of the busier Peak Period unit locations beginning July 1, 2002. The activation of a full-time unit would allow the re-deployment of a Peak Period unit.

The Department will continue to analyze system demand, call volume, request for service, population, and response times to determine the Division's needs through FY 2006.



Units Dispatched Within the City Limits

Additional EMS Unit/Redeployment of Peak Period Unit

ADDITIONAL EMS UNIT/ REDEPLOYMENT OF PEAK PERIOD UNITS

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	$ 109,307					$ 109,307
Recurring Costs	$ 389,941	$ 1,076,937	$ 1,076,937	$ 1,076,937	$ 1,076,937	$ 4,697,689
TOTAL	**$ 499,248**	**1,076,937**	**1,076,937**	**1,076,937**	**1,076,937**	**$ 4,806,996**

Four Person Pumper Manning

Background

One of the original goals of the Fire Master Plan was to achieve four-person *average* pumper manning. The proposed strategy for achieving this goal called for the hiring of forty-five additional firefighters over a five-year period. Since FY 1995, twenty-seven firefighters were added in order to achieve the original goal of providing four-person average pumper manning.

Due to citizen concern, Fire Department staff was directed by City Council to conduct additional analysis of the four-person pumper manning plan. As a result of this additional analysis, the Department recommended a program to establish *minimum* levels of four-person pumper companies. The revised manpower goal was to achieve a minimum of 33 of the Department's 43 pumpers being manned with four persons beginning in January of FY 1998. In FY 1999, the plan called for 36 of 45 pumpers to be manned with four persons. In FY 2000, 39 of 46 pumpers were manned with four persons.

In May of 1997, the City Council added ten firefighters through the amendments in order to assist in achieving the minimum four-person pumper manning goal. The additional ten firefighters added by the amendment not only assisted in achieving the four-person manning goal but also allowed the Department to staff two additional fire companies in FY 1997 and FY 1998.

Program Description

The Department proposes to continue the four-person pumper manning program. This improvement is scheduled to be incrementally phased-in and updated throughout the life of the plan. The four-person pumper manning program results in improved safety for fire fighting personnel and improved fire fighting efficiency in extinguishing fires and providing medical assistance.

In the past, the Fire Department budget has been supplemented in several areas to eliminate the need for turnover savings to fund this program. In the future, the Department will utilize several strategies in order to achieve minimum levels of four-person manned companies. First, the Fire Department will continue to reduce the number of vacancies throughout the fiscal year by over-hiring in order to minimize the impact of vacancies occurring during the six-month training period. Historically, the Department has only been able to fill the exact number of positions that are vacant at the time a cadet class starts.

Second, the Department will continue to utilize overtime funding to supplement programs such as "Backdraft" the Band, Juvenile Firesetters Intervention, EMT continuing education, and Paramedic training classes which have traditionally detailed personnel out of the Suppression Division. This procedure has resulted in a decrease in available manpower for the Fire Suppression Division.

Implementation

In FY 2001, 40 of 48 pumpers will be manned with four persons, FY 2002, 40 of 48, FY 2003, 41 of 49, FY 2004, 42 of 50, and FY 2005, 43 of 50, and FY 2006 43 of 50 pumpers will be manned with four persons.

Four Person Pumper Manning

FOUR PERSON PUMPER MANNING						
	FY 02	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**TOTAL COSTS**
No. of Pumpers with Min. 4 Persons	**40/48**	**41/49**	**42/50**	**43/50**	**43/50**	
Additional Funding	-	-	-	-	-	
Base Budget	1,102,118	1,102,118	1,102,118	1,102,118	1,102,118	$ 5,510,590
Pumper Manning OT Costs	1,102,118	1,102,118	1,102,118	1,102,118	1,102,118	**$5,510,590**

12-Lead EKG

Background

San Antonio EMS personnel respond to over 28,000 cardiac related emergencies per year. Of these responses, EMS personnel transport over 15,000 cardiac-related patients. These types of incidents account for over 1,000 deaths per year in the San Antonio region alone. Of the 2,000 to 3,000 citizens that survive a serious heart-related episode, approximately 1,000 are permanently disabled and must continue medical therapy throughout the remainder of their lives.

Since its inception, the San Antonio EMS program has utilized three-lead Electrocardiograms (EKGs) for the assessment and treatment of cardiac patients. This equipment, which provides the community with a basic level of Advanced Life Support capability, allows paramedic personnel to assess electrical activity of a heart from two general perspectives or angles, which diagonally traverse the heart muscle. In the event that heart tissue involved in cardiac-related illnesses is located distant or opposite to the core areas assessed by the three-lead equipment, field personnel are unable to accurately determine the exact location, severity, and scope of the concern which consequently affects and restricts diagnosis and treatment rendered.

Improved patient care via the use of 12-Lead EKG equipment, which is similar to equipment utilized in hospital facilities, is achieved by allowing paramedics to assess the heart muscle from 12 electrical perspectives or vector angles, vastly increasing the possibility of pinpointing the involved location, its scope and severity. In many cases, determination of accurate location and associated information could result in the administration of appropriate medication in the pre-hospital setting, which could increase a patient's chance for survival and/or reduce the possibility of disabling after-effects experienced by the majority of heart attack victims.

Several recent peer-reviewed articles from journals including the Journal of the American Medical Association and the American Journal of Cardiology have demonstrated that patient outcomes are enhanced via the introduction of this technology. Dallas, Fort Worth, Houston, and Austin have introduced this enhancement with excellent results. 12-Lead EKGs are becoming recognized as "the Standard of Care" in the large metropolitan systems. The Guidelines 2000 Conference of the American Heart Association in San Diego announced that 12-Lead EKG capability is a Class I recommendation for EMS systems. Introduction is expected to benefit over 4,000 patients during the first year.

Program Description

The EMS Division of the San Antonio Fire Department proposes a program to equip all ambulances with 12-Lead EKG equipment. The goal of this program is to improve the level of cardiac care provided to the citizens of San Antonio and other served communities. 12-Lead EKG equipment allows trained paramedic personnel to better assess, treat, and possibly medicate cardiac patients with heart-related illnesses or arrhythmias beyond the capabilities of the three-lead EKG equipment currently in use.

Implementation

The Department plans to purchase the 12-Lead EKG equipment over a four-year period. Ambulances would be equipped with 12-Lead EKG equipment at the rate of ten per year.

12-Lead EKG

12-Lead EKG						
	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	229,906	229,906	229,906	229,906	-	919,624
Recurring Costs	-	-	-	-	-	-
TOTAL	**$ 229,906**	**$ 229,906**	**$ 229,906**	**$ 229,906**	**$ -**	**$ 919,624**

Emergency Management Enhancement

Background

The Office of Emergency Management is a division of the San Antonio Fire Department with a staff of four full-time employees; a Coordinator, a Management Analyst and two Administrative Assistants. The Management Analyst was added in FY 2000 to the Emergency Management staff.

The objective of the Emergency Management Program is to enable local government to focus on:

- preventing emergencies whenever possible (MITIGATION)
- achieving emergency preparedness (PREPAREDNESS)
- responding to emergencies of all kinds (RESPONSE)
- recovering quickly from emergencies (RECOVERY).

Responsibilities of the Office of Emergency Management include:

- Development of Emergency Plans
- Management of the Weapons of Mass Destruction Program
- Coordination of the planning efforts associated with the State Hurricane Evacuation Program (Reception Plan)
- Coordination of the planning efforts associated with the Federal Repatriation Program (Reception Plan)
- Public Education – Disaster Preparedness
- Acting as a repository for Tier Two Reports for the San Antonio Fire Department and for the Local Emergency Planning Committee (LEPC) for Bexar County
- Networking through local organizations
- Maintaining the Emergency Operations Center (EOC) in a constant state of readiness.

Emergency Management Enhancement

Programs managed by the Office of Emergency Management require on-going, extensive planning, monitoring and coordination efforts among city departments, state and federal agencies, and private industry.

An emergency management executive team was established for the purpose of formulating a long-range plan to improve EOC operations. This team evaluates improvements to include technological enhancements to the EOC necessary to assist in incident management as well as possible funding alternatives to assist in funding improvements.

Program Description

The Office of Emergency Management requires the addition of one Special Projects Coordinator to implement the EOC training plan, to coordinate community disaster planning and education, and seek private partnerships from the community to assist in alternative funding.

Implementation

The Department will add one Special Projects Coordinator in FY 2002 to the Emergency Management Staff. The cost of this improvement will be $58,347 in FY 2002. Some of these costs may be 50% reimbursable under the Emergency Management Assistance Grant.

Emergency Management Program

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	26,518					26,518
Recurring Costs	31,829	60,971	60,971	60,971	60,971	275,713
TOTAL	**$ 58,347**	**$ 60,971**	**$ 60,971**	**$ 60,971**	**$ 60,971**	**$ 302,231**

Fire Suppression Technology Enhancement

Background

The San Antonio Fire Department currently utilizes Mobile Data Terminal (MDT's) in all of its emergency response vehicles. Presently, new replacement terminals are unavailable, which relegates the City to purchasing used equipment dependent on availability.

In addition to the unavailability of replacement MDT's, the existing MDT's are antiquated and cannot be upgraded. The MDT's in fire vehicles also provide limited incident data and are fixed position devices that need to be installed in every active and reserve fire vehicle.

Program Description

This program provides for the replacement of all fixed position MDT's with "state of the art" Cellular Digital Packet Data (CDPD) laptops. The CDPD replacement systems, are rugged, portable, and can be moved from vehicle to vehicle. The CDPD's also use current technology, which provides a direct link to the Computer-Aided Dispatch System, as well as provide the capability for in-vehicle mapping, directional routing, server access, pre-plan file access, operating procedure access, and limited Automatic Vehicle Locator (AVL) capabilities.

This enhancement will improve firefighting effectiveness since fire units will have access to additional fire incident information unavailable before. The AVL technology, in particular, will allow the Department to automatically determine the location of each unit and determine the closest unit to a specified address.

Implementation

Laptops with CDPD technology will be purchased and installed in 107 fire vehicles. Additionally, 13 spare units will be purchased. The Department is implementing this program over a

Fire Suppression Technology Enhancement

three-year period. Funding was provided in FY 2000 and in FY 2001 to replace 40 MDT units each year. The final phase will replace 40 MDT units in FY 2002.

FIRE SUPPRESSION TECHNOLOGY ENHANCEMENTS

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	355,960	-	-	-		$ 355,960
Recurring Costs	120,992	120,992	120,992	120,992	120,992	$ 604,960
TOTAL	**$ 476,952**	**$ 120,992**	**$ 120,992**	**$ 120,992**	**$ 120,992**	**$ 960,920**

Decentralization of Fire Prevention

Background

The Fire Prevention Division currently consists of 24 uniformed and two civilian personnel, who perform inspections, conduct public fire prevention education, issue permits, and perform office administration.

Presently, all field inspectors report to 115 Auditorium Circle in the morning and receive their daily inspection assignments and any other instructions deemed necessary. Inspections conducted include inspections for: Certificate of Occupancy; State required inspections for foster care homes and day care centers; citizen complaints; acceptance test witnessing; and various other inspections. Field inspectors have the option to return in the afternoon or enter the inspection results the next morning on their office computers. Several field inspectors are assigned to various boards and committees and must attend special meetings and perform special inspections. School and Hospital Inspectors schedule their own assignments, as does the Event Coordinator.

In addition to conducting inspections, all inspectors are required to maintain state certification, which includes 20 hours of annual continuing education. This is either accomplished by attending formal training sessions at remote locations, or by informal training sessions held locally and in-house.

Program Description

The Fire Department proposes to increase the efficiency and effectiveness of the fire prevention function through technological enhancements. In FY 2000, field personnel responsible for development related inspections were provided with laptop computers, cellular phones; pagers, and digital cameras. In FY 2002, five additional field inspectors within the Fire Prevention Division will be provided with this technology. The laptop computers will provide real time data in the field. The laptop computers will allow the inspectors to directly upload their inspections for a given day and download the results of field inspections into the City's mainframe computer while conducting inspections in the field. Rather than waiting for inspection slips to be printed, inspectors will receive inspection requests on a laptop computer with all applicable permit information. In addition, Fire Code text will be available on the computer to assist the inspector in the field. Updating from the field rather than the office will allow the inspectors to spend more time in the field, thereby performing more inspections. The additional time available in the field will provide the capability for each inspector to conduct at least one more inspection per day. The productivity equivalent of these additional inspections is one inspector. Both the laptop computer and a digital camera will improve inspection documentation and communication. The cellular phones and pagers will provide better communication between building contractors and the inspectors.

Implementation

Continuation of this program includes the purchase of the specialized computer and communications equipment for five field inspectors in FY 2001. No additional personnel are required. This should result in improved productivity due to the elimination of significant travel time to and from the office, stopping to make pay phone calls, and improved scheduling of inspection report data entry.

Decentralization of Fire Prevention

In addition to the initial hardware cost, the Department will be responsible for yearly recurring costs of $14,845 beginning in FY 2002. The Fire Department is offsetting the cost of this program through a 3% surcharge on all Fire inspection fees.

DECENTRALIZATION
FIRE PREVENTION

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs:		-	-	-		-
Recurring Costs:	14,845	14,845	14,845	14,845	14,845	74,225
TOTAL	**$ 14,845**	**$ 14,845**	**$ 14,845**	**$ 14,845**	**$ 14,845**	**$ 74,225**

Vehicle Replacement & Acquisition

Background

The Fire Department has continually endeavored to address the adequate replacement of all of its emergency vehicles. Maintaining these vehicles beyond their useful life not only results in a financial burden, but also reduces the reliability of these vehicles to perform critical functions which impacts the safety of the community as well as fire personnel.

Through input from the Blue Ribbon Committee Report issued in 1992, the original Five-Year Fire Department Master Plan, staff and apparatus repair professionals, emergency vehicle life expectancies have been established.

VEHICLE TYPE	USEFUL LIFE IN YEARS
Ladder Truck	18
Pumper	16
Service Truck	12
Haz-Mat	12
Brush Truck	10
EMS Unit	4

The Fire Department Services Division is currently in the process of acquiring a computer fleet management system. This system will allow for detailed analysis of actual repairs and maintenance cost per vehicle. The information gathered through this system would provide a better understanding of when vehicles should be replaced.

Since 1990, the Department has placed all newly acquired firefighting vehicles into the City's Vehicle Replacement Fund. When a vehicle is purchased under this program, the Department begins making monthly contributions to the fund based on the projected replacement cost of the vehicle and its life expectancy. When vehicles are eligible for replacement, the funds are subsequently available for purchase.

This program establishes a replacement schedule until such time as all vehicles are covered under the Vehicle Replacement Fund. Furthermore, the schedule attempts to keep the Department's fleet within the useful life criteria.

Vehicle Replacement & Acquisition

The procedure for distributing firefighting vehicles throughout the Department is based on several factors.

First, the Fire Department has adopted a strategy to equalize wear on existing fire suppression apparatus. Each individual fire company places various levels of mileage and wear on the apparatus based on both run distances and number of calls.

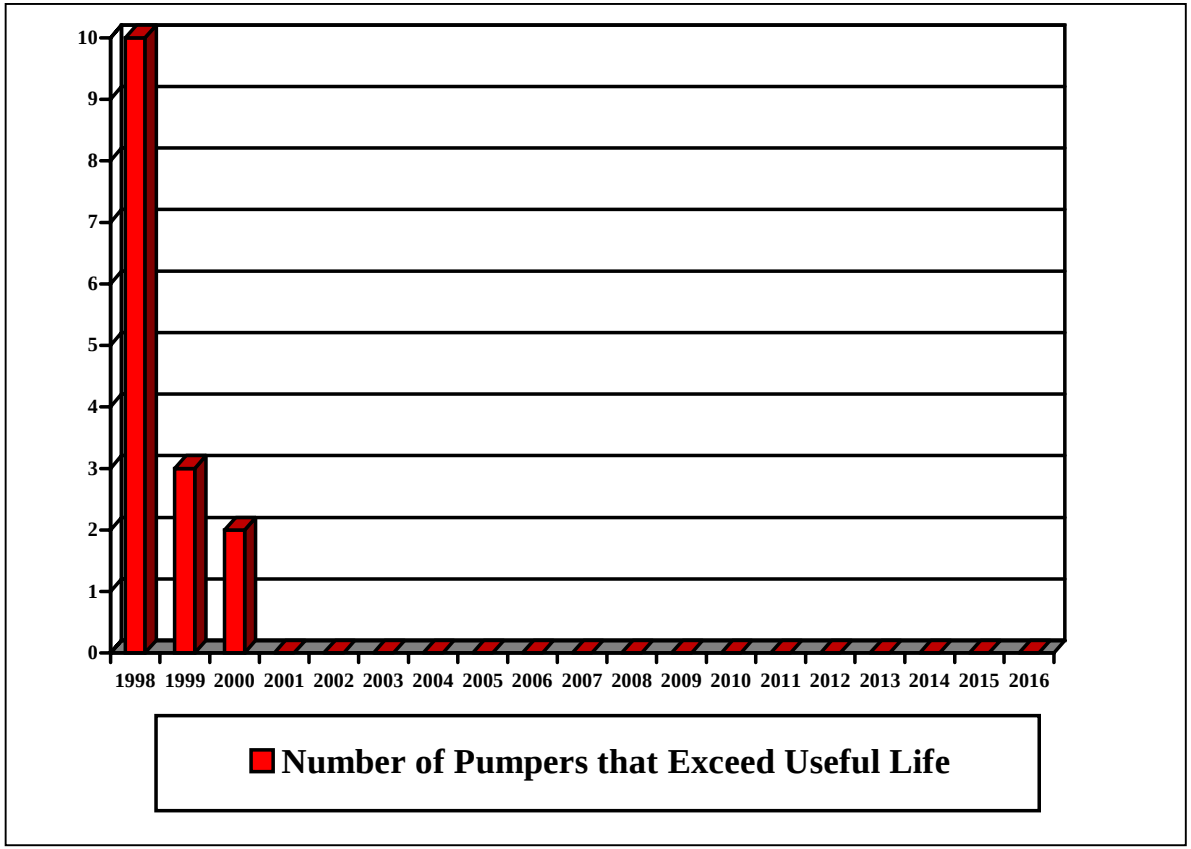
Periodically, apparatus are exchanged with one another in order to equalize mileage. This not only equalizes wear but also maximizes warranty benefits.

Secondly, the Department considers the terrain of a service area when determining which equipment will be stationed at any given fire station location. A percentage of the vehicles within the Department's fleet are capable of variable horsepower settings as well as increased braking ability. The units with these capabilities are placed in areas that have steeper inclines requiring these features. All new vehicles are now being purchased with these same capabilities.

Additionally, vehicles may be moved on a temporary basis in order to cover for areas that require the added horsepower and braking capability. This situation would include any time that fire apparatus in these areas are taken out of service for any reason. The need to make these moves will diminish as the Department takes delivery on these new vehicles. At this time, all needs are being met by the assignment of appropriate pumpers in these areas.

Program Description

The Vehicle Replacement Program serves to provide the Fire Department with a long-range vehicle replacement schedule.



Vehicle Replacement & Acquisition

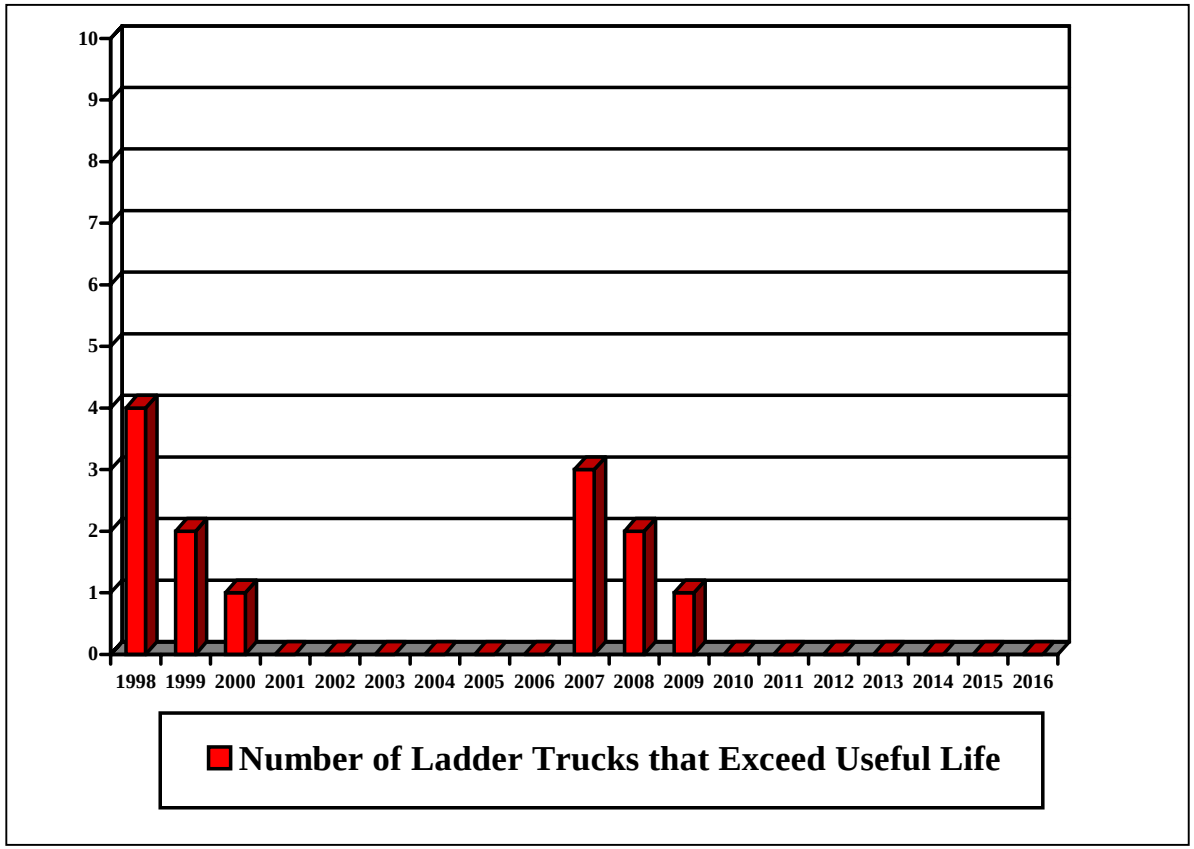
Implementation

A structured apparatus replacement program was implemented in FY 1998 through the budget process. Funds were allocated for the purchase of four pumpers and one ladder truck in FY 1998.

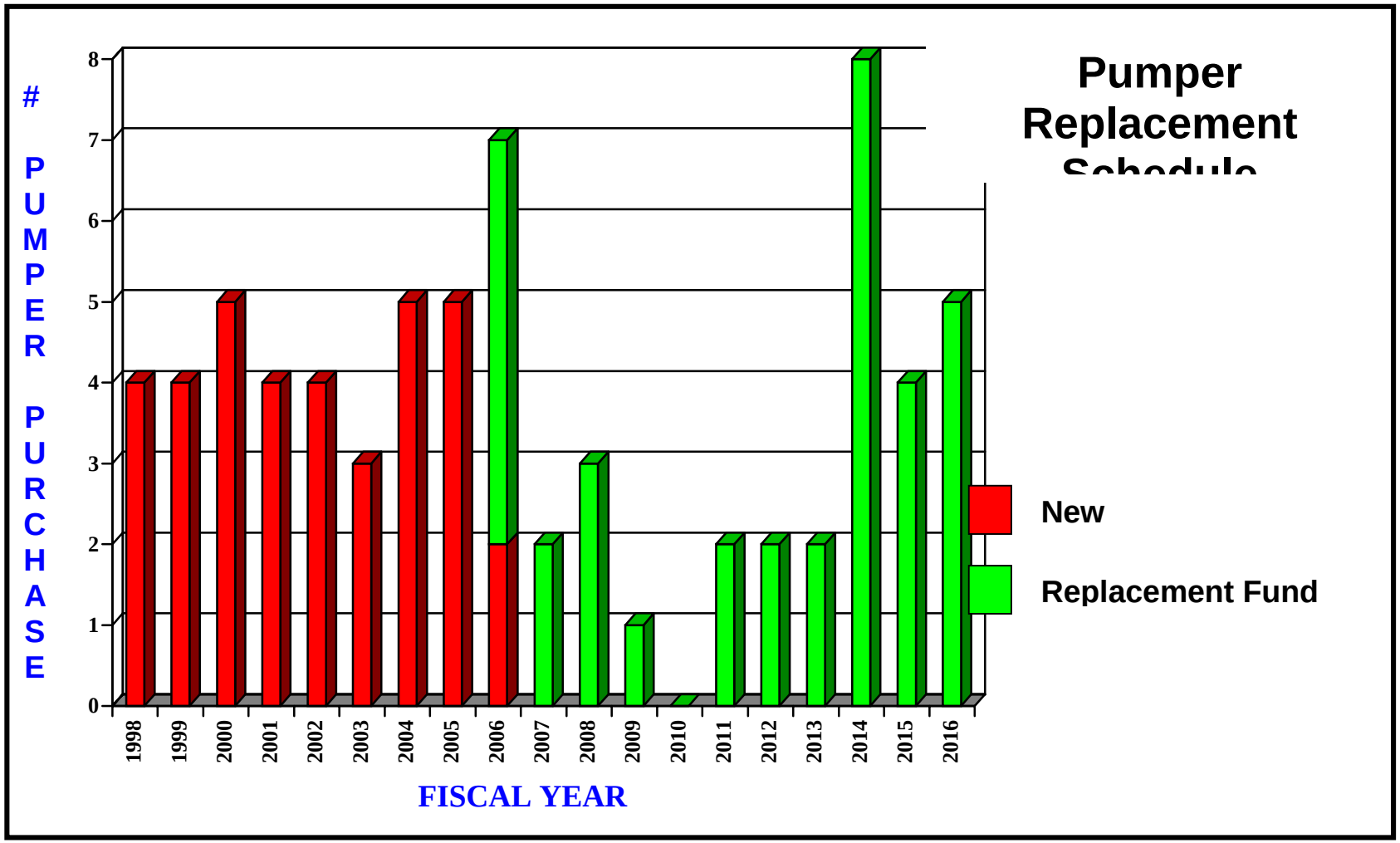
In FY 1999, funds were allocated for four pumpers, two ladder trucks and two brush trucks and in FY 2000 funds were allocated for five pumpers, one ladder truck and one brush truck.

In FY 2001, the Fire Department received funding for the replacement of four pumpers and one ladder truck. In FY 2002, the Department is requesting funding for the replacement of four pumpers, one ladder truck, and one Hazmat vehicle.

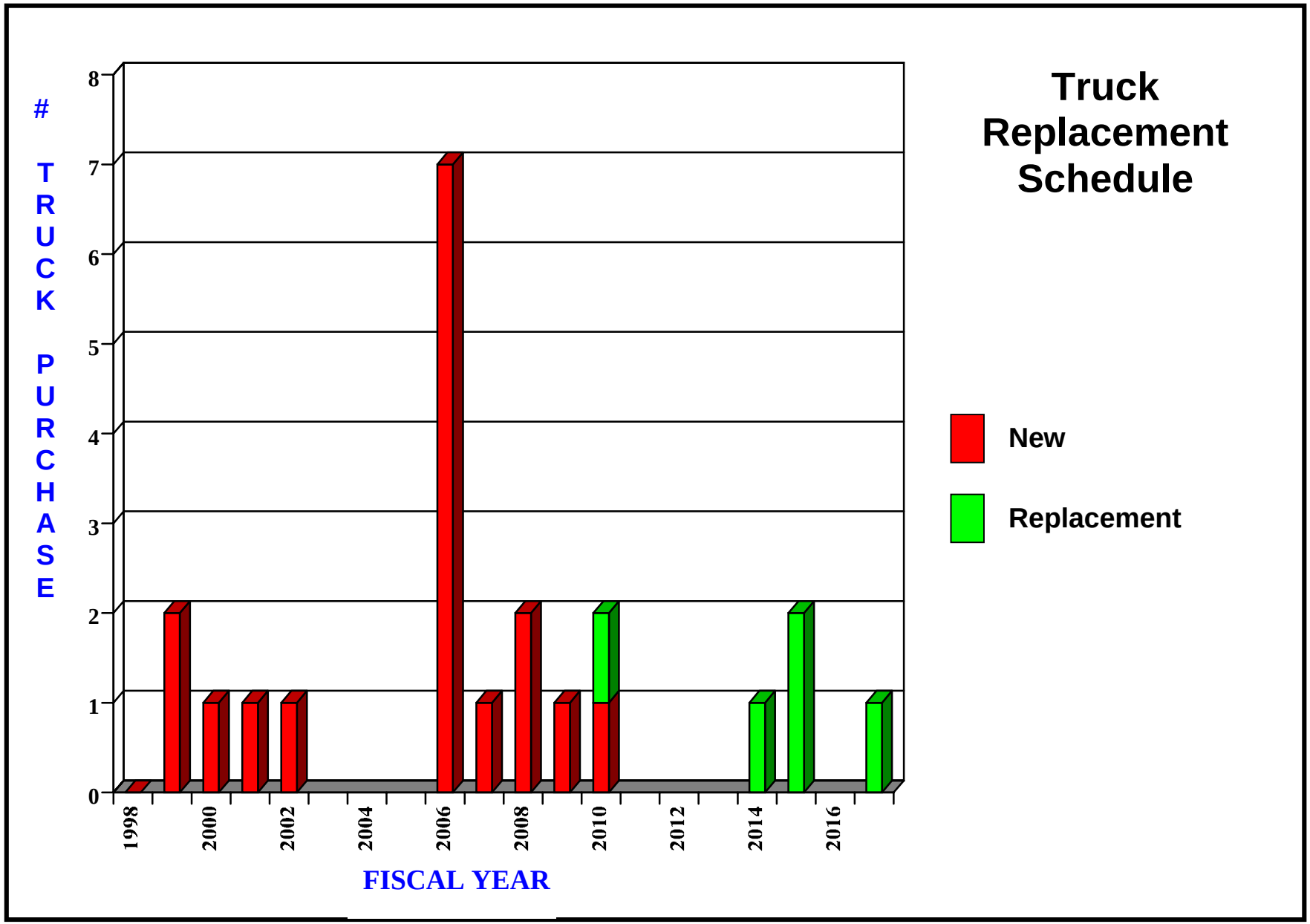
This program provides for the continuation of purchasing vehicles in a manner that affords the most cost effective and efficient use of the City's resources as well as provide for the safety of the community and employees.



Vehicle Replacement & Acquisition



Vehicle Replacement & Acquisition



Vehicle Replacement & Acquisition

		FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
4 pumpers, 1 ladder, 1 hazmat							
	One-time Costs	$ 173,050	$ 692,200	$ 692,200	$ 692,200	$ 112,233	$ 2,361,883
	Recurring Costs		$ 131,667	$ 131,667	$ 131,667	$ 131,667	$ 526,668
3 pumpers							
	One-time Costs		$ 325,476	$ 325,476	$ 325,476		$ 976,428
	Recurring Costs			$ 54,375	$ 54,375	$ 54,375	$ 163,125
5 pumpers							
	One-time Costs			$ 542,460	$ 542,460	$ 542,460	$ 1,627,380
	Recurring Costs				$ 90,625	$ 90,625	$ 181,250
5 pumpers							
	One-time Costs				$ 542,460	$ 542,460	$ 1,084,920
	Recurring Costs					$ 90,625	$ 90,625
2 ladders							
	One-time Costs					$ 291,998	$ 291,998
	TOTAL	$ 173,050	$ 1,149,343	$ 1,746,178	$ 2,379,263	$ 1,856,443	$ 7,304,277

Ladder Truck Buy-in Program

Background

A long-standing issue that has faced the San Antonio Fire Department is the batch purchase of certain apparatus. In the past there have been several instances where, through bond issues, large quantities of apparatus have been purchased in a single year.

YEAR	PURCHASED
1977	9 Pumpers
1986	7 Pumpers
1988	10 Pumpers 11 Ladder Trucks

Although a larger number of vehicles purchased at one time tend to provide certain economies of scales, associated problems may also arise.

Specifically, if a problem occurs with a particular manufacturer, the problems are enhanced due to the larger numbers of apparatus affected.

Because of the larger numbers of pumpers (59) maintained by the Department, problems associated with the purchase of ten vehicles are not as critical.

In FY 1988, the City of San Antonio Fire Department purchased 11 ladder trucks through the utilization of bond funds. These 11 ladder trucks constitute 52% of the entire truck fleet. At the time of purchase the vehicles were not placed into the City's vehicle replacement program.

Program Description

The purpose of the buy-in program is to mitigate the financial impact of purchasing a large number of vehicles within a specific fiscal year.

Therefore, in order to limit the financial impact of purchasing 11 trucks at an estimated cost of approximately $6,765,000 (not inflated), in FY 2006, the Fire Department is proposing that funds be set-aside in FY 2001 through FY 2005. The Fire Department proposes to set aside the funds during this time period since there will not be a need to replace a ladder truck based on the useful life expectancy criteria from FY 2003 through 2005.

Implementation

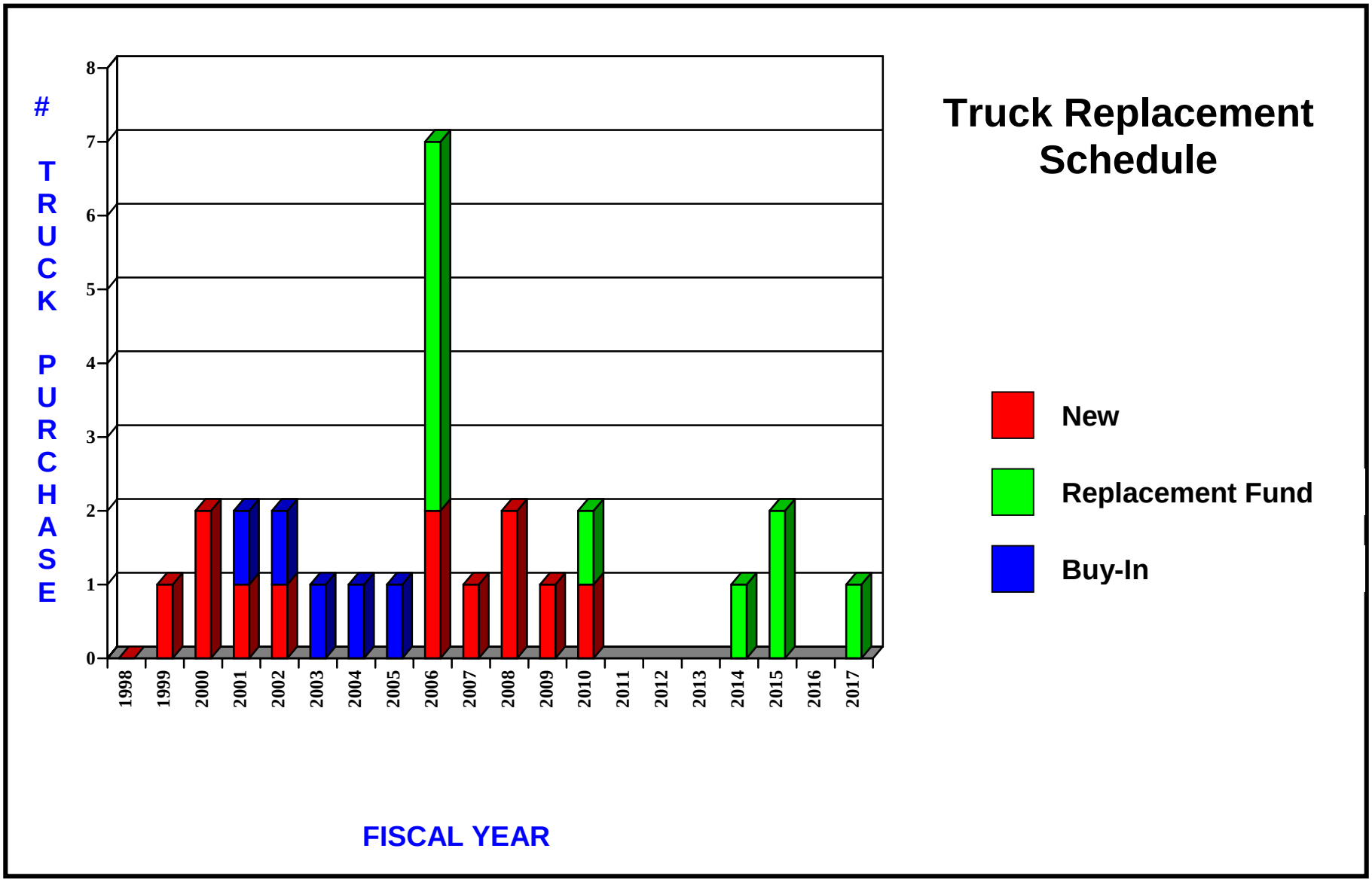
Under this program, the following amounts (not inflated) will be placed in the fund:

FISCAL YEAR	AMOUNT
2001	$615,000
2002	$615,000
2003	$615,000
2004	$615,000
2005	$615,000

In FY 2006, funds will be available from the replacement fund to purchase five ladder trucks. An additional two ladder trucks will be purchased that same year through the general fund. This will accomplish the replacement of seven of the 11 trucks requiring replacement.

It is further recommended that the replacement of the remaining ladder trucks be spaced out over the next three fiscal years.

Ladder Truck Buy-in Program



Ladder Truck Buy-in Program

LADDER TRUCK BUY-IN PROGRAM FIRE SUPPRESSION						
	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs						
1 Truck Buy-in	$ 615,000	$ -	$ -	$ -	$ -	$ 615,000
One-time Costs						
1 Truck Buy-in	$ -	$ 615,000	$ -	$ -	$ -	$ 615,000
One-time Costs						
1 Truck Buy-in	$ -	$ -	$ 615,000	$ -	$ -	$ 615,000
One-time Costs						
1 Truck Buy-in	$ -	$ -	$ -	$ 615,000	$ -	$ 615,000
TOTAL	**$ 615,000**	**$ 615,000**	**$ 615,000**	**$ 615,000**	**$ -**	**$ 2,460,000**

First Responder Squads

Background

In order to provide patient basic life support, fire trucks began responding to medical emergency incidents as first responders. Beginning in FY 1995, first responder squads were added to some double-company stations (i.e., a pumper and a ladder truck station), to provide a more efficient use of fire suppression vehicles for fires. Existing fire truck personnel (one person from the station's pumper and one person from the station's truck) are used to man the squads when dispatched. This leaves six fire fighters at the station to man the pumper and ladder truck for subsequent assisting EMS or fire calls.

Currently, there are 12 active first responder squads, located at stations #11 (610 South Frio); #8 (619 S. Hamilton), #14 (2525 Thousand Oaks Dr.), #17 (8545 Jones Maltsberger), #29 (827 Hot Wells), #32 (2235 Babcock Rd.), #33 (2002 S.W. 36th St.), #35 (7038 Culebra), #36 (5826 Ray EllisonDrive); #37 11011 Vance Jackson), #38 (6000 Distribution), and #40 (14331 O'Conner Rd.).

Four additional first responder squads are currently programmed for stations #9 (649 Del Mar), #21 (5537 S. Flores), #34 (15300 Babcock Rd.), and #41 (9146 Dover Ridge).

Program Description

This program increases the total first responder fleet to 18 squads.

First responder squads should result in better utilization of resources and reduce the severity of civilian injuries and fatalities. Additionally, this enhancement should result in improved availability of fire suppression vehicles for fires, and less wear and maintenance costs for the pumpers and ladder trucks.

Implementation

The department will add two squads in FY 2002. The cost of this program over the next five years is $211,820. This includes the cost of tint, alarm, one-time medical supplies, and other recurring cost, such as replacement funds.

First Responder Squads

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	87,500	-	-	-	-	$ 87,500
Recurring Costs	24,864	24,864	24,864	24,864	24,864	$ 124,320
TOTAL	**$ 112,364**	**$ 24,864**	**$ 24,864**	**$ 24,864**	**$ 24,864**	**$ 211,820**

Fire Department Safety Program

Background

In January of 1997, the Safety Program was established by the Fire Administration based on the need to record and reduce the number of injuries within the Department. One Fire Captain's position was created as the San Antonio Fire Department Safety Officer and assigned to the San Antonio Fire Department Training Division. Previously, there was no avenue to explore safety-related issues and to learn from them to prevent their recurrence.

The Safety Officer has been able to analyze the circumstances of the more severe firefighter injury incidents, but has not been able to analyze the recurring day-to-day injury trends due to the lack of an injury database and data entry personnel. The production of "Safety Reviews" after every major fire has led to a better understanding of the risks associated with firefighting by fire suppression personnel and has increased safety awareness on the fireground at large scale incidents due to the presence of the Safety Officer on the scene.

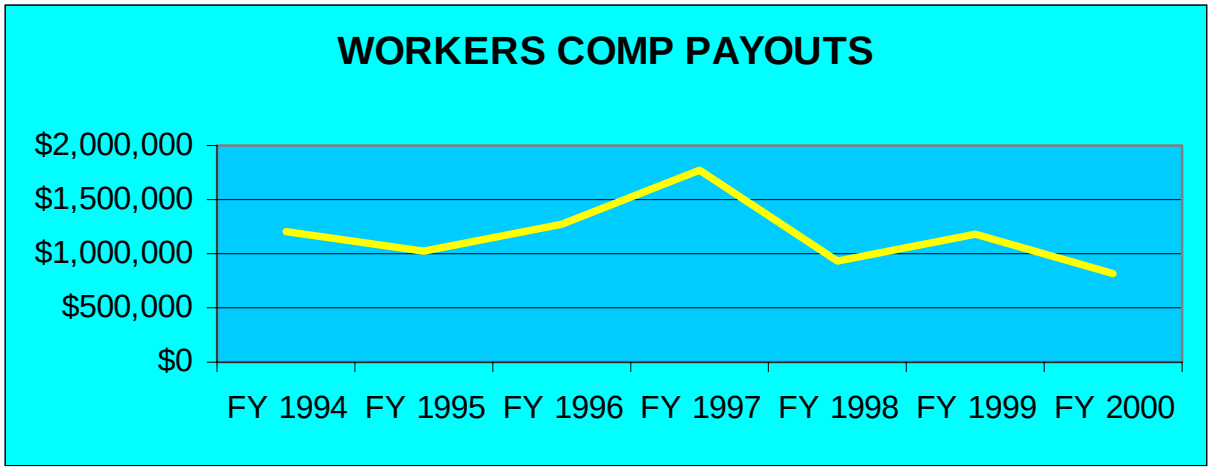
With no fire suppression duties, the Safety Officer's primary function on the fireground is to ensure compliance of personal protective clothing procedures and maintain contact with the Incident Commander to report safety concerns and fireground hazards. As the program has developed and the education and experience of the Safety Officer increased, major injury occurrences on the fireground have decreased.

With the development of several safety programs and acquisition of additional equipment, the safety of San Antonio Fire Department firefighting personnel has improved. One of several programs that has been developed through the Safety Officer includes the "Saving Our Own" which is a program designed to train firefighters on the difficult task of rescuing downed firefighters in a hazardous environment.

Strides have also been made in firefighter safety through the development of new standard operating procedures such as the implementation of the Rapid Intervention Team concept. This program provides a stand-by team of firefighters at all working structural fires that are ready to intercede for any call for help by firefighting personnel.

Program Description

The goal of the Fire Department Safety Program is to mitigate injury and death, as well as administer to the health and safety of all Fire Department personnel.



Fire Department Safety Program

The time necessary to produce Safety Reviews, investigate accidents and injuries, and develop new programs based on analysis is beyond the capabilities of one officer. Staffing needs require that one civilian fire safety coordinator and two additional fire safety officers be added. The safety coordinator will develop protocols and programs to mitigate employee injury while providing a proactive approach to injury prevention. Safety Officers will respond to incidents to provide a higher level of safety, perform accident and injury investigations and provide additional instruction on safety programs and procedures to Fire Department personnel. In FY 2003, an Administrative Assistant I is proposed to provide administrative support to the safety program.

Implementation

The program would be implemented over a three-year period, beginning in FY 2002. In FY 2002 a civilian Special Projects Coordinator is proposed. A Lieutenant and an Administrative Assistant will be proposed in FY 2003. An additional Lieutenant in FY 2004. The first year cost of this program is $58,723.

FIRE DEPARTMENT SAFETY PROGRAM

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	$ 27,311	$ 44,950	$ 44,950	$ -	$ -	$ 117,211
Recurring Costs	$ 31,412	$ 104,996	$ 186,853	$ 234,397	$ 234,397	$ 792,055
TOTAL	**$ 58,723**	**$ 149,946**	**$ 231,803**	**$ 234,397**	**$ 234,397**	**$ 909,266**

EMS Public Education Program

Background

The EMS Division of the San Antonio Fire Department is one of the most active EMS organizations in the country, providing over 107,000 emergency responses per year. In addition, the Fire Department regularly responds to a greater number of medical emergencies than the total number of fires, hazardous material spills, and swift water rescues combined. Presently, over 81% of the calls firefighters respond to are medically-related emergencies. Given the number of emergencies not related to fires, the City requires an expanded injury prevention curriculum to meet the urgent, emergent and long-term needs of the community. While some requests for life safety education are currently handled by EMS field personnel while on-duty or on an overtime basis, the majority of the requests can not be addressed due to the high demand for emergency service.

According to the former Surgeon General C. Everett Koop, "Each year more children die from preventable, unintentional injuries than from all childhood diseases combined." In fact, the leading cause of death of children fourteen years old and younger is

unintentional injury. Next to heart disease, unintentional injury is the second leading cause of death in adults, age fifty and under.

San Antonio EMS recommends that life safety skills be taught throughout a child's life to help them react properly when faced with various hazards and emergencies. Two criteria form the basis for the curriculum:

- The dangers children face at various ages.
- Their ability to learn cognitive and practical skills.

As children grow, more information and skills are taught to match their developing cognitive and physical abilities. For example, a kindergartner is taught to dial 9-1-1. As a child reaches fourth grade, he or she can receive CPR instruction.

Program Description

The Fire Department proposes to add one civilian position to better coordinate Life Safety practices to educate the community. The goal of this program will be to teach school children, the elderly and disabled, the skills necessary to protect themselves and their families by preventing injuries or responding properly when confronted with a life safety hazard.

The training conducted by this position will focus on areas such as the proper use of the 911 system, CPR awareness, poison dangers, bicycle safety, water safety, basic first aid, use of safety belts and the prevention of other types of mishaps and accidents.

Implementation

The San Antonio EMS Division recommends adding the position in FY 2003. With the addition of this position, the department will be able to conduct approximately 100 additional sessions and contact over 10,000 people. Moreover, the department is estimating that about 54% of the requests for life safety education will be filled as opposed to filling only about 23% at this time.

EMS Public Education Program

The core curriculum consists of the following sections:

1. Transportation Safety

- Be a Safe Pedestrian
- Practice Transportation Safety
- Bicycle Safety

2. Safety in the Home

- Call "9-1-1" to Report an Emergency
- Practice Water Safety
- Identify the Need for CPR Training
- Understanding Basic First Aid

3. Outdoor/Recreation Safety

- Practice Vacation and Outdoor Fire

EMS PUBLIC EDUCATION PROGRAM						
	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	$ -	$ 16,518	$ -	$ -	$ -	$ 16,518
Recurring Costs	$ -	$ 31,829	$ 60,971	$ 60,971	$ 60,971	$ 214,742
TOTAL	**$ -**	**$ 48,347**	**$ 60,971**	**$ 60,971**	**$ 60,971**	**$ 231,260**

Continuing Education For Fire Suppression

Background

Presently, firefighters are required to complete 20 hours of State continuing education per year in order to maintain their certification. An additional eight hours of Hazardous Material training is required by the Federal Department of Transportation annually.

Currently, this training is provided through the use of video taped modules, which are presented by officers at each fire station location. Although this fulfills the State and Federal requirement, it lacks the hands-on effectiveness that can be achieved by bringing personnel into a well-equipped training facility.

A new training academy is planned through funding from the 1999 Bond Program. The proposed training academy includes funding for a live burn facility as well as a state of the art drill tower. These state of the art fire-training components will provide the department with training opportunities currently not available.

Program Description

In order to take full advantage of all the training capabilities of the new training academy, a program is being initiated that will allow the Fire Department to provide eight hours of continuing education training at the training academy per firefighter per year. Under this plan, 1055 firefighters will be trained annually.

The focus of the training curriculum for fire suppression will center on the live fire training facility. Although firefighters responded to 1,280 structure fires in FY 2000, there is a need to practice new tactical procedures as well as reinforce existing skills.

Implementation

Beginning in FY 2003, the Department will provide eight hours of continuing education to each firefighter assigned to fire suppression. This program will require funding to backfill positions while fire suppression personnel receive continuing education training.

Continuing Education

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
Recurring Costs (Overtime Costs)	$ -	$ 225,159	$ 231,914	$ 238,871	$ 246,038	$ 941,982
TOTAL	**$ -**	**$ 225,159**	**$ 231,914**	**$ 238,871**	**$ 246,038**	**$ 941,982**

Training Personnel

Background

The Fire Department Training Academy currently enlists the assistance of eight uniformed and one civilian personnel to accomplish all of the training in-house. A District Chief supervises the Training Section as well as the Vehicle Maintenance Section; one Captain acts as the Training Coordinator (manager); there are two Captain instructors and three Lieutenant instructors; one Captain Safety Officer; and one Secretary. Cadet training is conducted by the three Captains and the three Lieutenants. The continuing education is conducted by one of the Lieutenants, with assistance from other officers as needed. The current staff can train approximately 88 cadets per year in the cadet training program. Some of the current requirements for training are as follows:

1. The Texas Fire Commission requires the Training Academy to adhere to State standards (458-hour curriculum) for certification of all new personnel as Basic Structural Firefighters. The San Antonio Fire Department requires that all new personnel complete a 940-hour (458 hours inclusive), 25 week program at its Fire Academy prior to being certified and allowed to function as a firefighter.

2. The Texas Fire Commission requires the Training Academy to adhere to Texas Department of Health (TDH) standards for certification as an Emergency Care Attendant (ECA). The San Antonio Fire Department requires Basic Emergency Medical Technician (EMT-Basic 200-hour curriculum) certification of all new personnel, which exceeds the Texas Fire Commission's minimum requirements.

3. The Texas Fire Commission requires that all uniformed Fire Department personnel receive a minimum of 20 hours of continuing education training yearly.

4. The Federal Department of Transportation requires that all fire department uniformed personnel receive a minimum of eight hours of Hazardous Materials continuing education training yearly. The Department of Transportation also requires that all Hazardous Materials continuing education training be properly documented and archived as official records.

The Fire Academy is currently capable of satisfying the mandated minimum requirements by both the State and Federal governments. The potential to exceed these requirements is restricted by lack of facilities, equipment, and personnel.

The purpose of the following program recommendations is to have a Fire Academy that will realize its full potential and become a quality resource for its personnel and possibly function as a regional training center.

Program Description

The Training Academy will be divided into two major program areas: Cadet Training, and Continuing Education. The Training Academy will be directed by a Chief Officer who will be assisted by a Training Coordinator. A Captain, three Lieutenants, and three FAOs will be assigned to Cadet Training and one Captain will be assigned to coordinate the Continuing Education curriculum. This would bring the total number of full time training personnel to ten. Although personnel will be assigned to specific program areas, they would not be limited to functioning exclusively in those areas, but would be utilized accordingly during peak training

Training Personnel

periods. In addition, three support personnel (one Administrative Assistant II, one Administrative Aide, and one Secretary) will staff the facility. The assignment of one Building Custodian will also be necessary in order to provide basic maintenance of the Fire Academy facility during operating hours.

Cadet Training. The Training Academy will accommodate larger classes in order to maintain proper staffing levels.

Continuing Education. The new Training Academy will provide approximately 30 to 35 continuing education hour blocks for all fire suppression personnel. This will satisfy the 20-hour minimum requirement as set forth by the Texas Fire Commission. The curriculum for continuing education will be developed and designed by the Training Academy's Continuing Education Coordinator.

The Fire Academy will be available to include outside training for other departments and agencies in the area for a set fee. The Academy may also host training courses for citizens such as a Youth Public Safety Academy and a Citizens Fire Safety Academy. As the needs of San Antonio change and the manner in which firefighters are utilized, the academy will continue to develop new strategies and train its personnel to better serve the community.

Implementation

The additional personnel and related expenses would be phased in over a three-year period. In FY 2002, one FAO would be added. In FY 2003, personnel additions would include one FAO, one Administrative Assistant II, one Administrative Aide, and one Building Custodian. In FY 2004, the third FAO would be added. As the FAO positions are added, the cadet training program could be expanded annually to accommodate larger cadet classes.

Training Personnel

TRAINING STAFF						
PROGRAM COSTS	**FY 02**	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**TOTAL COSTS**
One Time Costs	$ 8,842	$ 122,499	$ 8,759			$ 140,100
Recurring Costs	$ 35,143	$ 318,641	$ 447,140	$ 511,037	$ 526,374	$ 1,838,335
TOTAL	**$ 43,985.00**	**$ 441,140.00**	**$ 455,899**	**$ 511,037**	**$ 526,374**	**$ 1,978,435**

Management Information Services

Background

The Fire Department's Management Information Systems (MIS) division was initially established in FY 1994 as part of the original Fire Master Plan. The Master Plan called for the creation of an MIS Division to meet current and future data management and computer training needs of the Fire Department.

The Department's MIS division was created to oversee system development and maintenance. Additionally, the division would support the automated data processing needs of the Fire Department and develop MIS systems and computer programs to control expenses, supplies, inventory, workloads, scheduling, personnel and payroll.

The first MIS division position to be staffed was the Department Systems Manager in late FY 1994. Shortly thereafter a Software Specialist was added in FY 1995. In FY 1996 a Department Systems Supervisor and a Department Systems Specialist were added. During FY 1999 a Telecommunications Technician and an additional Department Systems Specialist were added to the help staff the division.

During this time period the Department's computer devices inventory increased from an initial count of 21 computer devices in FY 1995 to 294 in FY 2000 to an estimated 505 devices in FY 2001. The computer needs range from laptop MDT's to servers; in house connectivity to citywide connectivity.

Program Description

In order to meet the tremendous increase in computer devices and dynamic demands placed on the MIS division such as the creation of specialized databases, Penpad technology, Geographic Information System technology and Laptop MDT's, the Fire Department is proposing to increase the staffing of the MIS division by two positions in FY 2002.

The addition of one Senior Geographic Information System Analyst and one Geographic Information Analyst is recommended for FY 2002 to provide better data analysis. The additional GIS staff will allow the Department to participate in the City's GIS system to provide more consistent and effective delivery of geographical information. A third GIS Analyst will be proposed for FY 04. It will also provide the Department with the ability to perform analysis for public outreach, public awareness and education, as well as station placement.

Additionally, the Department proposes to add one Software Specialist in FY 2003 and one Department Systems Specialist in order to meet the increasing management information needs of the Fire Department.

With the increased usage of database-driven software, as well as the increased needs for timely data, the addition of a Software Specialist is recommended. The Software Specialist position would be responsible for administering the databases utilized by the Fire Department. The number of databases utilized by the Department continues to increase from ten in FY 1999 to 15 in FY 2000 and is projected to increase to 28 in FY 2002.

The Software Specialist will also supervise and implement software applications utilized by the Fire Department. This Software Specialist will assist with the increasing number of technology-related projects, support users, and conduct training. Major MIS projects have increased from nine in

Management Information Services

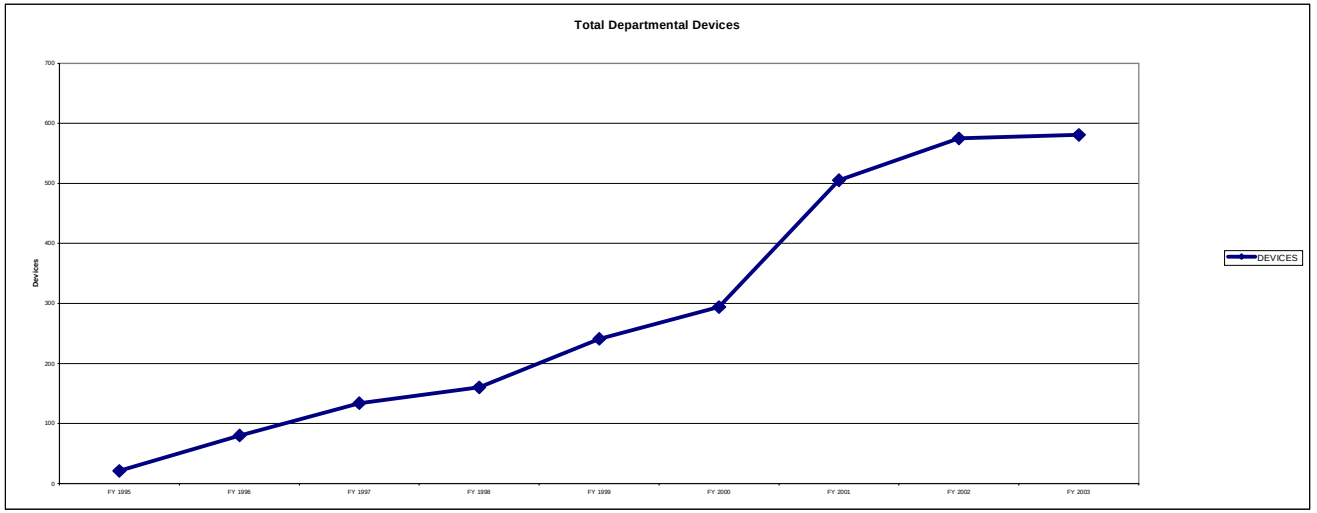
FY 1999 to ten in FY 2000 and are projected to increase to 18 in FY 2002. As the Department continues to expand its technological capabilities, the amount of training for field and support personnel on the hardware and software utilized by the Department must continue to increase.

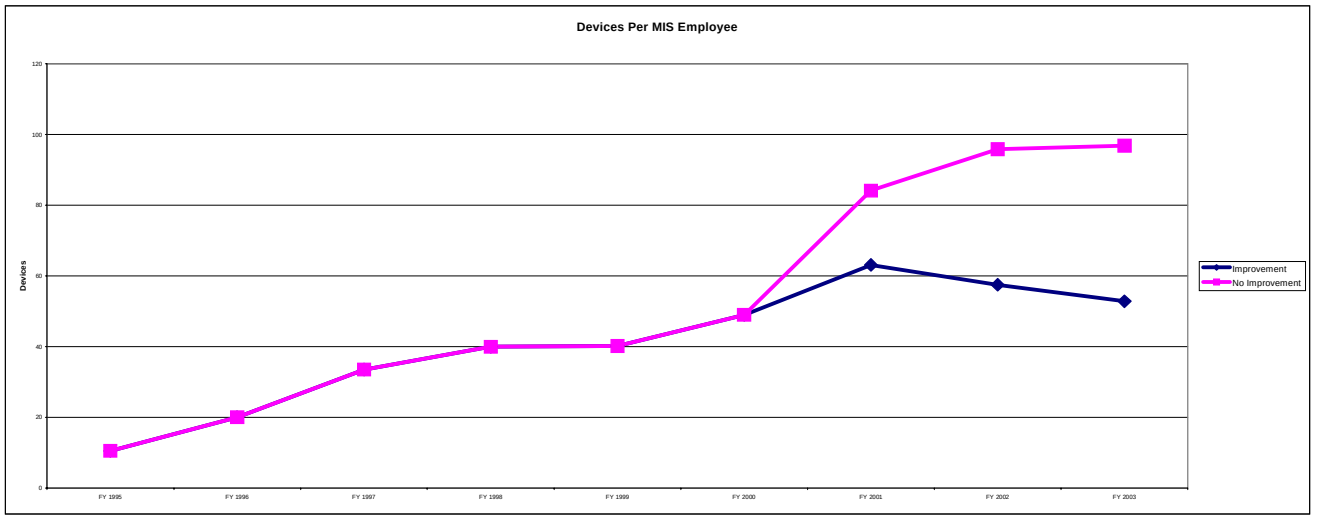
It is also recommended that one Department Systems Specialist be created in FY 2003 to assist in maintaining the Department's extensive computer hardware needs. The hardware of the Department is wide ranging and varies in age and usage. The Systems Specialist will assist in the creation and performance of a Preventative Maintenance program for the Departments hardware. The Systems Specialist will also maintain the MIS inventory in an attempt to minimize computer downtime

The MIS Division supports the LMDTs with CDPD modems utilized by Fire and EMS; the LMDTs with integrated modems utilized by Fire Prevention; the Pen Pads utilized by EMS, as well as all desktop and laptop computers, hand held devices, printers, and modems utilized by the Department personnel. The MIS Division also evaluates, recommends, implements, and supports all technological aspects of the Department.

As has been illustrated, the scope of work performed by the MIS staff has increased significantly since the division's inception in FY 1994.

There is an increasing number of technology-related projects such as the development and implementation of Laptop MDT technology to replace outdated and discontinued MDT's, the use of penpad computers for EMS case reporting to provide better data





Management Information Services

analysis, the participation in the City's GIS system to provide more consistent and effective delivery of geographical information, and the increased use of databases. In addition, a higher level of maintenance is required to support the Department's growing computer hardware needs.

The program recommended in the proposed document will allow the Department to maintain its technological needs while moving forward in its goal to provide an excellent level of service to the citizens of San Antonio.

Implementation

The Department proposes to add two GIS personnel in FY 2002, one Software Specialist and one Department Systems Specialist in FY 2003 and an additional GIS analyst in FY 2004.

MANAGEMENT INFORMATION SERVICES

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	$ 19,200	$ 7,063	$ 9,600			$ 35,863
Recurring Costs	$ 58,296	$ 166,524	$ 252,052	$ 279,519	$ 279,519	$ 1,035,910
TOTAL	**$ 77,496**	**$ 173,587**	**$ 261,652**	**$ 279,519**	**$ 279,519**	**$ 1,071,773**

Personnel Investigators

Background

The processing of firefighter applicants has a dramatic influence on the Four-Person Manning Program. Before the implementation of the program, the number of vacant positions at any given time had little or no fiscal impact. After the implementation of the minimum staffing program, the number of vacant positions had a significant impact on overtime expenditures. Minimizing the number of vacant positions reduces the overtime expenditures associated with the program. Increasing the efficiency and effectiveness of the hiring process is essential to maintaining the adequate staffing levels necessary to continue the program at the lowest possible cost.

Since implementation of the Minimum Staffing Program, the processing of firefighter applicants has become a year-round task. Each year, over 2,000 individuals submit applications to become San Antonio firefighters. Generally, about 1,600 pass the exam and are placed on the eligibility list. From the eligibility list, the department processes approximately 150 to 300 applicants each year. Among those individuals processed, approximately 70 to 80, candidates will meet the minimum eligibility requirements to attend the Fire Training Academy. Based on the present hiring rate, the Fire Department will hire approximately 373 firefighters from October 1998 to September 2004. During the same period, the department will retire approximately 216 firefighters.

The Personnel Services Division manages the Recruiting and Applicant Processing functions for the Fire Department. The Applicant Processing Section has a staff of six employees. The staff consists of one civilian employee performing clerical functions; one civilian employee and three uniformed employees conducting background investigations; and one uniformed employee acting as the Applicant Processing Coordinator. At present, the Department must back-fill three uniformed employees from their regular duty assignments in the Fire Suppression Division to support the applicant processing function. This circumstance generates requirements for salary, overtime and high-class pay.

Program Description

The Department proposes to assign additional civilian Personnel Investigators in place of uniform positions to achieve a substantial reduction in personnel costs.

The addition of civilian investigators will return uniformed personnel to the Firefighting Division thereby eliminating overtime and high class pay as well as re-establishing the positive influence achieved by having officers present at their assigned work locations.

Implementation.

The Department proposes to add two civilian Personnel Investigators in FY 2002 completing the Master Plan program putting civilian investigators in the applicant processing section.

Personnel Investigators

CIVILIAN PERSONNEL INVESTIGATORS						
	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One Time Costs	$ 28,990					$ 28,990
Recurring Costs	$ 36,103	$ 72,206	$ 72,206	$ 72,206	$ 72,206	$ 324,927
TOTAL	$65,093	$72,206	$72,206	$72,206	$72,206	$ 353,917

Facilities Support

Background

The San Antonio Fire Department has 54 facilities that span throughout its 417 sq. mile service area. The majority of the facilities maintained by the Fire Department are operational 24-hrs a day seven days a week. The facilities staff is responsible over 450,000 square feet of facilities that are encompassed on two million square feet of land.

Currently the facilities staff includes one coordinator and one Administrative Assistant.

The staff is responsible for the coordination and supervision of various projects relating to Fire Department Facilities. Projects include the building of new stations which require items be built to the strictest safety regulations, functionality requirements and Fire Department specifications. The Coordinator is also responsible for maintenance issues pertaining to major Facility Improvement Maintenance Program (FIMP) projects as well as common building maintenance. The Facilities Section has handled over 1900 work requests in FY 2000 and anticipates a 16% increase in FY 2001. The Facilities Coordinator works closely with the Public Works Department to ensure compliance and completion on each work project performed.

Program Description.

The Fire Department is proposing to enhance the facilities division to be capable of performing a heightened level of service required by the Fire Department. This program expands the Department's capability to respond to work requests as well as providing a platform for proactive maintenance. Additional positions will allow the Coordinator the ability to concentrate on planning efforts that will allow for proactive building maintenance inspections. The proactive maintenance plan will allow for increased service life of all Fire Department facilities. The Coordinator will then be able to focus on utilizing preventative maintenance measures that would allow for enhanced resource planning and cost savings.

Implementation.

The Department proposes to add one building maintenance officer in FY 2002 and add one building maintenance officer and one administrative assistant in FY 2003.

FACILITIES SUPPORT PERSONEL

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
One-time Costs	20,027	23,885	-	-		43,912
Recurring Costs	19,873	76,656	113,566	113,566	113,566	437,227
TOTAL	**$ 39,900**	**$ 100,541**	**$ 113,566**	**$ 113,566**	**$ 113,566**	**$ 481,139**

Capital Projects

Background

The original Fire Department Master Plan identified the need for safe, adequately constructed, and strategically located facilities and equipment.

Fourteen stations were evaluated and determination made which resulted in the recommendation to renovate six existing stations and replacement of six additional stations. Concerning the replacement of six additional stations, realignments were considered to improve response times throughout the City. The realignments were reviewed by City Council and confirmed in May of 1997.

The Master Plan continues to fulfill and enhance the goals established in the original Plan with regards to facilities.

RENOVATION OF FIRE STATIONS

The original Fire Department Master Plan called for the renovation of the following six Fire Stations:

FIRE STATION #1
801 E. HOUSTON

FIRE STATION #5
1011 MASON

FIRE STATION #6
503 W. RUSSELL

FIRE STATION #9 **COMPLETED**
649 DELMAR

FIRE STATION #10 **COMPLETED**
1107 CULEBRA

FIRE STATION #13 **COMPLETED**
3203 S. PRESA

The oldest of these stations is over 80 years old and all were in dire need of major improvements to upgrade the living conditions of firefighters and paramedics. These projects are under design, construction or have been completed at this time.

All renovations will be accomplished with personnel and equipment remaining on site in temporary facilities or temporarily relocated to the nearest available facilities or a combination of both. The removal of personnel and equipment is necessary in that the Department has become aware of the hazards to personnel that may be encountered during extensive renovations of these old facilities. This will alleviate concerns regarding firefighter safety and living conditions during the renovation process. It will also strive to maintain firefighting and EMS companies in their original location or as close as possible.

The estimated cost of the remaining renovations is $2,017,000.

New Construction

Regarding the construction and location of new fire stations, the original Master Plan provides the Fire Department with a goal of having the first arriving pumper company located within 4 minutes and 15 seconds travel time of 90% of all city blocks. This travel time criterion is used in the placement of new or replacement fire stations.

Capital Projects

- In 1994, 84.2% of all city blocks could be reached within the 4 minute 15 second travel time criteria

- With the addition of the Fire Station #46 (Stone Oak area) and the realignment of Fire Station #20 (S. W.W. White Rd.), 88.4% of all city blocks can be reached within the 4 minute 15 second travel time criteria

- The Department achieved 88.8% at the end of FY 2000.

- It is projected that the Department will achieve 89.8% by the end of FY 2001.

The amended Fire Department Master Plan provided for the replacement of older fire station facilities within their present response areas. This improvement will furnish much larger and modern facilities:

FIRE STATION #20 AT
2903 S. NEW BRAUNFELS
REALIGNED TO 3347 S. W.W. WHITE

FIRE STATION #7 AT
604 S. ALAMO
REALIGNED TO ST. MARYS AND FLORIDA

FIRE STATION #8 AT
2323 BUENA VISTA
REALIGNED TO 600
S. HAMILTON

FIRE STATION#11 AT
323 S. FRIO
REALIGNED TO 610
S. FRIO

FIRE STATION #16 AT
1519 NOGALITOS
REALIGNED TO NOGALITOS
AND RIPPFORD

FIRE STATION #25 AT
2242 NEW LAREDO HWY. AND
MCLAUGHLIN

All of the areas served by these replacement stations will remain within the 4 minute 15 second travel time criteria.

New fire stations being constructed as part of the Fire Department Master Plan are Fire Station #45 to serve the Westover Hills area, Fire Station #46 to serve the Stone Oak and Encino Park areas, Fire Station #47 to serve the IH10/Camp Bullis area, Fire Station #48 to serve an area at 1604 between Bulverde Rd. and 0'Conner, Fire Station #49 to serve an area in northwest San Antonio along the Council District 7/8 border. Fire Stations #50 and #51 are proposed in this plan as possible in-fill stations.

Fire Station #20, at 2903 S. New Braunfels at Steves, has been realigned into a new facility at 3347 S. W.W. White. This provides fire service to the previously underserved southeast side where a large area could not be reached within the travel time criteria. The area previously served by Fire Station #20 is surrounded by nearby fire stations, the closest of which is #13, nine blocks away at Steves and South Presa. Old Fire Station #20 is in extremely poor condition and does not lend itself to any type of reasonable renovation as a fire station.

Fire Station #12 at 1102 S. Flores near Alamo St. has structural, living conditions and space limitations

Capital Projects

problems that do not allow it to remain as a fire station for the future, regardless of the amount of renovation that may be done to it. These facts, coupled with it's near proximity to neighboring fire stations, has brought the Fire Department to the conclusion that this building would best be utilized for a purpose other than housing fire or EMS companies.

The company from Fire Station #12, which includes the apparatus and its entire crew, will remain in the downtown area. Retaining this company will allow the formation of a double company at the new Fire Station #11, at 610 S. Frio. This replacement station is being built just over a half mile from the current location of Fire Station #12. Coupled with the construction of a new Fire Station #7 just south of its present location at 604 S. Alamo, this alignment of the two newest, largest fire stations in San Antonio, will provide excellent pumper, truck, first responder and EMS coverage to the entire downtown area.

There will be no reduction in the number of pumper or truck companies in the inner city area under the current plan. This plan will also allow the expansion of the Department's Technical Rescue Team.

Cost for the construction of these seven new fire stations is projected to be $20,330,000.

After construction of the new fire stations, it is projected that stations will be located so that a first arriving pumper company can travel to 90% of all city blocks within the 4.25 minute travel time criterion. This places the Department in line with the goal of the original Fire Department Master Plan.

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COSTS
FIRE STATION #1 RENOVATION (E HOUSTON)	$ 1,324,000	$ -	$ -	$ -	$ -	$ 1,324,000
FIRE STATION #5 RENOVATION (MASON)	$ 693,000	$ -	$ -	$ -	$ -	$ 693,000
FIRE STATION #6 RENOVATION (W RUSSELL)		$ -	$ -	$ -	$ -	$ -
TOTAL	**$ 2,017,000**					$ 2,017,000
TOTAL CAPITAL COSTS FOR THREE RENOVATIONS	**$ 2,017,000**					

Capital Projects

NEW CONSTRUCTION PROJECTS

	FY 02	FY 03	FY 04	FY 05	FY 06	TOTAL COST
FIRE STATION # 7 NEW (SOUTH OF S ALAMO)	$ 1,194,000	$ 1,057,000				$ 2,251,000
FIRE STATION # 25 NEW (MILITARY/SOMERSET)	$ 1,090,000	$ 648,000	$ -	$ -	$ -	$ 1,738,000
FIRE STATION # 45 NEW (WESTOVER HILLS)	$ 1,831,000	$ -	$ -	$ -	$ -	$ 1,831,000
FIRE STATION # 47 NEW (IH 10 CORRIDOR)	$ 598,000	$ 1,617,000	$ -	$ -	$ -	$ 2,215,000
FIRE STATION #48 NEW (1604/BULVERDE)	$ 1,435,000	$ 418,000	$ -	$ -	$ -	$ 1,853,000
FIRE STATION #49 NEW (NORTHWEST)	$ 635,000	$ 1,257,000	$ -	$ -	$ -	$ 1,892,000
TRAINING ACADEMY	$ 4,300,000	$ 4,250,000	$ -	$ -	$ -	$ 8,550,000
TOTAL	**$ 11,083,000**	**$ 9,247,000**	**$ -**	**$ -**	**$ -**	$ 20,330,000

Adaptive Reuse Plan

This program outlines the reuse of Fire Department facilities that have been replaced. Recommendations take in to account the growth within the Department and associated support requirements.

One such use would be to support an effort from within the Department to preserve the history of the fire service in San Antonio. This effort requires a facility to store and display artifacts gathered throughout the long history of the Department.

In coordination with the City's Asset Management Department this program also serves to identify fire facilities that can be put to best use by organizations outside of the Department to ensure the greatest benefit to the city.

STATION	ADDRESS	REUSE
#8	2323 Buena Vista	Health Department
#12	1102 South Flores	Commercial Potential
#16	1519 Nogalitos	Commercial Potential
#20	2903 S. New Braunfels	Temp. breathing apparatus repair shop/Commercial Potential
#7	604 South Alamo	Fire Department Museum
#11	323 South Frio	Staging for water rescue and WMD equipment / vehicles
#25	2242 W. Southcross	Temp. Fire Facilities Maintenance Office and Storage

Capital Projects

Additional Renovation Projects

Background

The Fire Department continues to improve its facilities in order to provide for the safety of firefighter as well as the provision of excellent fire service throughout the community.

Additional Renovation Projects

In keeping with original goals of the Fire Department Master Plan, the plan proposes to continue the renovation of the remaining stations not covered in the original plan.

Beginning in FY 2001, the Department will evaluate the remaining 27 stations and proceed with recommended construction projects.

Renovation of Services

With the addition of vehicles to the Fire Department fleet throughout the past several years as well as the addition of fire facilities, the Department has identified a need to increase space requirements of the Services facility.

This improvement provides four additional repair bays, expansion of the breathing apparatus shop, and increase of administrative and storage areas.

New Renovation Projects

PROGRAM COSTS	FY 00	FY 01	FY 02	FY 03	FY 04	TOTAL COSTS
FIRE STATION RENOVATION PROJECTS	-	338,811	1,577,550	1,618,500		3,534,861
RENOVATION AND EXPANSION OF FIRE DEPARTMENT SERVICES DIVISION	-	-	-	300,398	3,560,613	3,861,011
TOTAL	**$ -**	**$ 338,811**	**$ 1,577,550**	**$ 1,918,898**	**$ 3,560,613**	**$ 7,395,872**

In-fill Stations

Background

The San Antonio Fire Department has, through its planning efforts, attempted to maintain a satisfactory level of emergency response across the entire city. The original Master Plan established a station location criteria that has been utilized not only for placing new stations, but also identifying areas throughout the city that lie in Extended Response Areas (ERA's).

The goal is to locate facilities so as to position the first arriving pumper within 4.25 minutes travel time of 90% of all city blocks. Travel time is defined as the time from when the fire unit leaves the station until its arrival at the scene. Although this goal is in direct correlation to response time, it should not be mistaken for an average response time goal.

FY	% City Blocks Covered
1998	**87.6%**
1999	**88.4%**
2000	**88.8%**

The Master Plan directed the realignment of existing facilities to better serve the community. During the Fire Department Master Plan amendment process in early 1997, the realignments were reassessed, modified and confirmed by City Council. At this same time two additional stations were added to the Master Plan to address two specific ERA's within the city.

STATION	ADDRESS
#48	Bulverde/1604
#49	Northwest

Station #48 became operational in FY00 and Station #49 in FY 2001.

Program Description

As part of the Master Plan process, the Department has again focused on the Extended Response Areas.

Seven significant ERA’s have been identified through analysis of computer generated projected travel times. These areas were confirmed with actual response times during the Master Plan update in 1997. All areas outside of the ERA’s are within 4.25 minutes travel time of a current Fire Department Facility.

Each of these areas has been, and will continue to be, evaluated with regard to the following factors.

- Population
- Residential and Commercial Structures
- Demographics
- Emergency Call Volume
- Total Block Records
- Area
- Average Travel Time
- Growth Potential

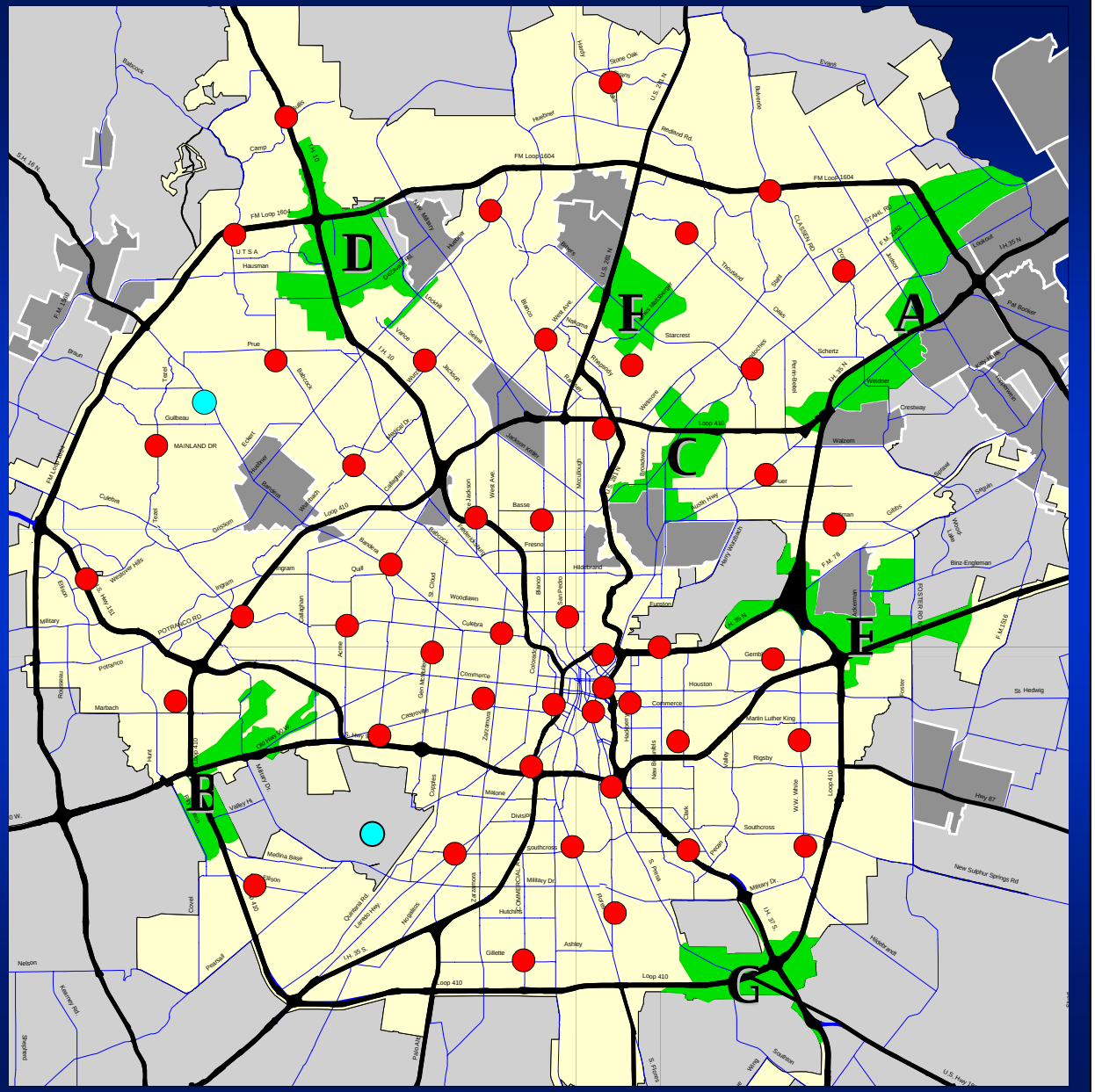
Recommendations will be made yearly based on the evaluation of the preceding factors.

Implementation

Through the above-described analysis, the ERA's will be prioritized. Additional fire stations will be recommended in order to address the significant ERA's.

Other strategies such as infrastructure improvements and traffic signal preemption will be considered in dealing with these Extended Response Areas.

In-Fill Station Study Areas



- Study Area
- Planned Fire Station
- Fire Station

In-fill Stations

INFILL STATIONS						
PROGRAM COSTS	**FY 02**	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**TOTAL COSTS**
MANPOWER AND EQUIPMENT - STATION #50 (TBD)						
Personnel Costs	$ 498,782	$ 1,026,446	$ 1,091,145	$ 1,091,145	$ 1,091,145	$ 4,798,663
Capital EquipmentCosts	$ 341,605	$ -	$ -	$ -	$ -	$ 341,605
One-time Training Costs	$ 27,585	$ -	$ -	$ -	$ -	$ 27,585
Equipment Recurring Costs	$ 26,471	$ 31,002	$ 31,002	$ 31,002	$ 31,002	$ 150,479
Capital Construction Costs	$ 596,579	$ 1,680,203	$ -	$ -	$ -	$ 2,276,782
TOTAL	**$ 1,491,022**	**$ 2,737,651**	**$ 1,122,147**	**$ 1,122,147**	**$ 1,122,147**	**$ 7,595,114**
MANPOWER AND EQUIPMENT - STATION #51 (TBD)						
Personnel Costs	$ -	$ 498,782	$ 1,026,446	$ 1,091,145	$ 1,091,145	$ 3,707,518
Capital Equipment Costs	$ -	$ 341,605	$ -	$ -	$ -	$ 341,605
One-time Training Costs	$ -	$ 27,585	$ -	$ -	$ -	$ 27,585
Equipment Recurring Costs	$ -	$ 26,471	$ 31,002	$ 31,002	$ 31,002	$ 119,477
Capital Construction Costs	$ -	$ 612,060	$ -	$ -	$ -	$ 612,060
TOTAL	**$ -**	**$ 1,506,503**	**$ 1,057,448**	**$ 1,122,147**	**$ 1,122,147**	**$ 4,808,245**
TOTAL IN-FILL STATION COSTS	**$ 1,491,022**	**$ 4,244,154**	**$ 2,179,595**	**$ 2,244,294**	**$ 2,244,294**	**$ 12,403,359**